APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,815	02/19/2002	Adam R. Schran	10397-3U1	7133

570 7590 08/17/2009 PANITCH SCHWARZE BELISARIO & NADEL LLP ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103		

EXAMINER
GOLD, AVI M

ART UNIT	PAPER NUMBER
2457	

MAIL DATE	DELIVERY MODE
08/17/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/078,815	SCHRAN ET AL.
	Examiner	Art Unit	
	AVI GOLD	2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 May 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>2-27 and 29-58</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>2-27 and 29-58</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

This action is responsive to the RCE amendment filed on May 27, 2009. Claims

7, 8, 34, and 35 were amended. Claims 57 and 58 were added. Claims 2-27 and 29-58

are pending.

Response to Amendment

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

Claim 34 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Claim 34 teaches an article of manufacture

comprising computer-readable program code, which can be implemented on software.

The idea that the article of manufacture can be embodied fully in software makes the

system software per se and non-statutory.

Claims 29-33, 35-54, and 56 are necessarily rejected as being dependent upon

the rejection of claim 34.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 2-3, 5-12, 14, 18, 23, 26, 27, 29-30, 32-39, 41, 45, 50, and 53-58 are

rejected under 35 U.S.C. 103(a) as being unpatentable over Claessens et al., U.S.

Patent No. 7,222,255, further in view of Rehkopf, U.S. Patent No. 6,505,249.

Claessens teaches the invention substantially as claimed including a system and

method for network performance testing (see abstract).

Regarding claims 7 and 34, Claessens teaches a method and an article of

manufacture a method and article of manufacture of optimizing network configuration

settings for a user's client machine, the method and article of manufacture comprising:

(a) providing a plurality of groups of network configuration settings (col. 10, lines

15-25, Claessens discloses different test configurations associated with identifiers);

(b) establishing a network connection between the client machine and a remote

server (col. 7, line 65 — col. 8, line 3, col. 8, lines 28-33, Claessens discloses a

communication session established between a client and server);

(c) selecting one of the groups of configuration settings to be used by the client

machine from the provided groups of settings (col. 10, lines 33-41, Claessens discloses

choosing a configuration setting from the inventory database);

(d) automatically conducting one or more performance tests using the selected network configuration settings during the established network connection (col. 10, lines 42-63, Claessens discloses a network performance test with the selected configuration settings);

Claessens fails to teach the limitation further including providing settings to be used by the user's client machine; wherein step (c) is initiated on the user's client machine; repeating steps (c) and (d) for one or more other groups of network configuration settings during the established network connection and (f) automatically adjusting the network configuration settings of the client machine, based on the results of the performance tests, wherein the adjusted network configuration settings are settings that optimize the performance of the client machine.

However, Rehkopf teaches a method for benchmarking and optimizing the end to end processing performance of a client-server based computer system to determine the optimal values of the system variables (see abstract). Rehkopf teaches performance settings for each system (col. 2, lines 21-30, 51-58), performance variables chosen on a system (column 5, lines 28-54), different benchmarking tests being performed (col. 2, line 59 – col. 3, line 11) and the optimal value of the performance variables chosen to modify the system and optimize performance (col. 6, lines 37-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Claessens in view of Rehkopf to provide settings to be used by the user's client machine; wherein step (c) is initiated on the user's client machine;

repeating steps (c) and (d) for one or more other groups of network configuration settings during the established network connection and (f) automatically adjusting the network configuration settings of the client machine, based on the results of the performance tests, wherein the adjusted network configuration settings are settings that optimize the performance of the client machine. One would be motivated to do so because it allows for the use of the most efficient network configuration settings.

Regarding claims 2 and 29, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein the adjustments of the network configuration settings are made through the use of an algorithm that performs statistical analysis on past network configuration setting performance test result data (col. 3, lines 13-26, col. 7, lines 3-10, Rehkopf discloses the use of statistical analysis and a statistical algorithm on past performance on the client).

Regarding claims 3 and 30, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein regression is used to perform the statistical analysis (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 5 and 32, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 6 and 33, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the remote server (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 8 and 35, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) the user specifying, via the client machine, at least one network performance preference; and

(h) executing performance metric scoring on each of the different provided groups of network configuration settings, based on a relative weight assigned to the network performance preference (col. 2 and 3).

Regarding claims 9 and 36, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein logic running on the remote server statistically analyzes the results of the performance tests and determines one or more groups of network configuration settings for use on the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 10 and 37, Rehkopf teaches the method and article of manufacture of claims 9 and 36 wherein the logic includes an intelligent optimization algorithm which uses historical performance data to statistically assess positive or

negative scoring variations when a particular network configuration setting is adjusted

(col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 11 and 38, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein the adjustments of the network configuration

settings are made through the use of an algorithm that determines future groups of

network configuration settings to test (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 12 and 39, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 further comprising:

(g) continually monitoring the network configuration performance of the client

machine, after step (f) has been performed; and

(h) automatically adjusting the monitored network configuration settings of the

client machine to maintain optimal network performance of the client machine (col. 4,

lines 35-54, Rehkopf discloses continually monitoring performance and re-evaluating).

Regarding claims 14 and 41, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein one of the network configuration settings is

latency (col. 8, lines 1-19, Rehkopf discloses bandwidth).

Regarding claims 18 and 45, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is Maximum Segment Size (MSS) (col. 8, lines 1-19, Rehkopf discloses segment size).

Regarding claims 23 and 50, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is packet size (col. 8, lines 1-19).

Regarding claims 26 and 53, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) assigning a percentage score to each applicable network configuration setting;

(h) multiplying the relative weight of each network configuration setting by the percentage score for the network configuration setting, wherein the relative weight is determined as a function of the user's network performance preferences; and

(i) adding the resulting products of step (h) to determine a weighted overall percentage score (col. 2, 3).

Regarding claims 27 and 54, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein step (b) further comprises:

(c)(i) the user selecting a group of default network configuration settings (col. 2, lines 23-30).

Regarding claims 55 and 56, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) storing the plurality of groups of network configuration settings in a storage location wherein step (c) further comprises selecting one of the groups of network configuration settings for the client machine from the storage location (col. 2, 3).

Regarding claims 57 and 58, Rehkopf teaches the method and article of manufacture of claims 7 and 34, wherein step (a) is performed by determining a plurality of groups of network configuration settings to be used by the user's client machine, wherein the determined settings are the provided settings (col. 10, lines 15-41).

4.   In considering claims 4 and 31, Claessens and Rehkopf are silent in that a polynomial curve fit is used to perform statistical analysis. "Official notice" is taken that both the concept and the advantages of a polynomial curve fit are well known in the art. It would have been obvious to one skilled in the art to utilize a polynomial curve fit as an efficient way to perform statistical analysis.

In considering claims 15-17, 19-22, 24, 25, 42-44, 46-49, 51, and 52, Rehkopf is silent in that ping time, network connection stability, Maximum Transmission Unit (MTU), Receive Window (RWIN), Time To Live (TTL), Black Hole Detection, Auto Discovery of Path Maximum Transmission Unit (MTU), upload throughput speed, and download throughput speed are various forms of network configuration settings.

"Official notice" is taken that both the concept and the advantages of those settings are

well known in the art. It would have been obvious to one skilled in the art to analyze

and adjust those settings in the network to monitor and optimize the performance of a

network.

Allowable Subject Matter

5.   Claims 13 and 40 objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Response to Arguments

6.   Applicant's arguments, filed May 27, 2009, regarding the use of Claessens and

Rehkopf have been fully considered but they are not persuasive.

7.   In response to applicant's arguments against the references individually, one

cannot show nonobviousness by attacking references individually where the rejections

are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

1986). Step (d) is in Claessens, not Rehkopf as argued. The different groups of

configuration settings are found in Claessens, while the repetition of testing settings is

found in Rehkopf. As the applicant points out, every time the floating variable is

changed Rehkopf tests that new setting. The combination of Claessens and Rehkopf

teaches optimizing (which is specifically shown in Rehkopf) network configuration settings.

8.   Regarding the 101 rejection, the addition of a processor and memory would make it clear that the article of manufacture is a device, thus overcoming the 101 rejection.

9.   The declaration submitted is not properly executed and does not adequately demonstrate prior invention.

1.   FORMALITIES:

2.   The declaration needs to be signed by all inventors and was only signed by one of the two; please see below for guidance from the MPEP.

715.04 [R-2]   Who May Make Affidavit or Declaration; Formal Requirements of Affidavits and Declarations
                    I. >< WHO MAY MAKE AFFIDAVIT OR DECLARATION

The following parties may make an affidavit or declaration under 37 CFR 1.131:

(A)   All the inventors of the subject matter claimed.

(B)   An affidavit or declaration by less than all named inventors of an application is accepted where it is shown that less than all named inventors of an application invented the subject matter of the claim or claims under rejection. For example, one of two joint inventors is accepted where it is shown that one of the joint inventors is the sole inventor of the claim or claims under rejection.

(C)   If a petition under 37 CFR 1.47 was granted or the application was accepted under 37 CFR 1.42 or 1.43, the affidavit or declaration may be signed by the 37 CFR 1.47 applicant or the legal representative, where appropriate.

(D)   The assignee or other party in interest when it is not possible to produce the
affidavit or declaration of the inventor. Ex parte Foster, 1903 C.D. 213, 105 O.G. 261
(Comm'r Pat. 1903).

Affidavits or declarations to overcome a rejection of a claim or claims must be
made by the inventor or inventors of the subject matter of the rejected claim(s), a party
qualified under 37 CFR 1.42, 1.43, or 1.47, or the assignee or other party in interest
when it is not possible to produce the affidavit or declaration of the inventor(s).

**As none of the conditions for signature by less than all the inventors has
been demonstrated, the submission does not qualify as a proper declaration, is
inadequate on its face and is entitled to no weight.**

In order to move on with prosecution the Examiner would like to point out some
substantive deficiencies with the proposed declaration.   These comments are
illustrative and not comprehensive.   The burden is on applicant to provide a proper
declaration if that is the method chosen for overcoming a rejection.

The Examiner would like to include some important sections from the MPEP for
the applicant's guidance:

"The affidavit or declaration and exhibits must clearly explain which facts or data
applicant is relying on to show completion of his or her invention prior to the particular
date. Vague and general statements in broad terms about what the exhibits describe
along with a general assertion that the exhibits describe a reduction to practice
"amounts essentially to mere pleading, unsupported by proof or a showing of facts" and,

thus, does not satisfy the requirements of 37 CFR 1.131(b). In re Borkowski, 505 F.2d

713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits

pointing out exactly what facts are established and relied on by applicant. 505 F.2d at

718-19, 184 USPQ at 33. See also In re Harry, 333 F.2d 920, 142 USPQ 164 (CCPA

1964) (Affidavit "asserts that facts exist but does not tell what they are or when they

occurred.")."

The applicant needs to show how the exhibits support the claimed

invention. Specifically, the sections pointed to in exhibit 1 that are said to

correlate to steps (c) and (e) do not appear to be fully supported by exhibit 1.

Step (c) teaches selecting from groups of network configuration settings while

the section relied on in exhibit 1 only discloses one group of settings; it is not

clear that there is more than a single group of settings. Step (e) teaches

repeating the selection from the groups of network configuration settings while

the section relied on in exhibit 1 only discloses one group of settings and not

repetition of choosing settings; the only repetition in the section relied on is that

of multiple tests of the one group of settings that was chosen.

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U.S. Pat. No. 6,842,431 to Clarkson et al.

U.S. Pat. No. 6,725,229 to Majewski et al.

U.S. Pat. No. 6,292,483 to Kerstein

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AVI GOLD whose telephone number is (571)272-4002. The examiner can normally be reached on M-F 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2457
AMG

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457